American Farmer,

AND SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY

"O Fortunatos nimium sua si bona norint
"Agricolas." . . . . *Virg.*

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For the American Farmer.

Culture of Indian Corn—Seed Oats—Weight of Cattle.

Indian corn has of late, become the most important crop on the Eastern Shore of Maryland, and perhaps of no less value in some of the counties on the Western Shore, and also in Eastern Virginia. I see many papers on this subject in the American Farmer, and also in the Farmer's Register, and many plans and schemes are recommended for its successful cultivation.

In our different soils, and variable climate, it appears to me, that the same system cannot be adopted to advantage. In a warm early spring, I would recommend early planting; a drought often occurs in the latter part of July, and in August, and the corn suffers more in its young state, than when more matured; in addition to which, it is always desirable to finish the cultivation before harvest, to get our wheat thrashed, and be prepared for the important business of autumn.

When the soil is sandy, or friable, as a general rule, I would recommend planting Indian corn from the 10th of April, to the 20th; but a stiff clay from the 20th to the 1st of May. The hazard of early planting, I do not consider is from the danger of its being cut off, by the frost, but the germ being destroyed, by the rotting of the grain, before it springs. Indian corn is a hardy plant, and tho' the leaves be nipped by frost, the roots will impart fresh vigor. One of the most successful corn growers on the Eastern Shore, cultivates a stiff tenacious clay, which he has improved by marl and putrescent manure, and seldom plants till the last week in April. Last year he made a full crop. In general there was a great failure, as the corn dealers in Baltimore will find from the diminished supply. In breaking ground for corn, I would not recommend ploughing deeper than the soil, but in the cultivation, I think it may be cut to advantage to the depth of ten or twelve inches; for this purpose, I use coulter ploughs. It is the general opinion that the substratum is a *caput mortuum*, and admitting this to be true, I think this cultivation to be beneficial. In a heavy rain when the soil in the ordinary cultivation becomes saturated, the excess remains on the surface, and does injury, but if the substratum be cut, it absorbs the surplus rain, and remains in a moist state; when the surface becomes dried by the sun it imparts moisture to the soil and aids vegetation. In lands which I have cultivated with the coulter plough, I have found roots of plants which had struck down more than twelve inches, and have supposed they received aid from the moisture, contained in the substratum.

The farmer ought never to forget, in a field where grass grows, he can never reasonably expect a full crop of corn. If the season be wet, and beyond the power of his ordinary force, to conquer the grass, it is good management and good economy, to call to his aid additional labor—for which he will be fully repaid.

There seems to have been some mistake in the weight of Col. Atlee's Oats; where grain is offered for seed, its quality ought to be faithfully represented; carelessness, and bad faith results in the same consequences. Oats are now an important crop on the Eastern Shore, and if seed could be obtained, without deception, I would recommend to our farmers to change their seed, at least once in three years. I once obtained seed oats from Somerset, and also from Bedford county, in Pennsylvania, and they gave me improved crops for several years; having obtained them from gentlemen on whom I could rely, I entertained no fear of imposition. In purchasing seed oats I should prefer them further North than Carroll county. Oats grown in the North of England, are of more value than those grown in the South.

The advantage of requiring cattle to be weighed, before they are sold, seems to be questioned by a writer in the American Farmer. An evidence of the benefit of the law, may be found in the combination of the butchers against it, when first passed. They felt it was calculated to restrain their imposition. It seems they now indemnify themselves for the loss by the estimate of the offal. I was once present, when Gen. Evans, an old and experienced grazier of Chester county, sold a lot of grass fed beeves to a Philadelphia butcher, by estimated weight, when upon my inquiry, he informed me the allowance for offal was forty pounds in the hundred. The scales are now some check on the butchers, and competition in time, will bring them to a just estimate of the proper deduction.

Rusticus.

E. S., Md., 14th April, 1843.

German, or Fly-proof Wheat.

Centreville Times Office,
Eastern Shore, Maryland, April 18, 1843.

To the Editor of the American Farmer.

Dear Sir—You some time since requested some notice from me of the German or Fly-proof Wheat forwarded to my order in the fall of 1841. The wheat was seeded late in consequence of sickness in my family, and the yield was not so great as that from a wheat I obtained from Messrs. Sinclair & Moore, called Harshy wheat; but the grain was fuller and heavier, and what was singular, tho' I had six different varieties growing last year, all on various soils, the Fly-proof was the only wheat which escaped the rust, and was the only perfect wheat I raised from 200 bushels sowing!

In the fall of 1842 I seeded all I raised from the seed obtained from you, and altho' again seeded too late, yet what has escaped the frost looks very well now.

You are mistaken, however, about the fly's not attacking it, tho' I do not declare that it will not resist it, from its very vigorous growth. One of my neighbors examined the field in May, 1842, and we found plenty of the fly in it, but when it was ripe, I found plenty of wheat on the ground, and do not think the fly injured it much, tho' you know, that throughout the State last year, there was an unusual growth of straw.

After harvest I will drop you a line more about the wheat, as I shall then have a better opportunity of determining its character. As at present advised, I shall retain a large parcel for seed again.

Yours, very respectfully, J. B. Spencer.

☞The heavy frosts of March greatly injured our Eastern Shore wheat fields, by throwing the plants out of the ground; and which have mainly perished on the surface. Our farmers have little or no corn to sell, and if they lose their growing wheat crop, their situation will be lamentable indeed.

J. B. S.

RUST.

To the Editor of the Farmer's Register.

In your No. for January, you request information in relation to the causes of rust, and the means of prevention and cure. The causes afford much ground for speculation, the remedy I fear hopeless.

Last year the baneful influence of rust was general on the Eastern Shore of Maryland, with the exception of points of land which project into the salt waters of the Chesapeake Bay, and some large salt water rivers.

Men of science, who have made natural history their study, often find difficulty in accounting for an isolated fact, which contradicts general experience, and the effects you mention of the crude lime upon the pumpkin patch will afford them a puzzle. I gather from your statement, that caustic lime applied one year, for the protection of the pumpkins, disclosed its benefits next year by preventing rust on wheat. The lime must have been then carbonated. In 1841, Governor Grason, who is my neighbor, applied caustic lime to a part of a field, in which he sowed wheat; he had on it a great growth of straw, but his crop was ruined by the rust. In the same year, I sowed in fields marled and unmarled, and the injury was indiscriminate. These, in addition to the facts stated by Mr. Peyton, in relation to the calcareous soil of Kentucky, put beyond question that lime is not a panacea for rust. Though I entertain the opinion, in a favorable season when wheat ripens well, that the quantity of wheat is increased, and the grain improved by the application of calcareous manures. I do not concur with you in opinion, that plethora is the cause of rust; if this was the case, rust would be confined to luxuriant wheat, but it spares neither the fat or the lean kind. I have seen wheat which would not produce more than six bushels to the acre, as much damaged as that which would produce twenty.

If putrescent manures be applied in excess, or there be too much vegetable matter in the soil, in the most propitious season, wheat will be defective; but the disease is mildew, a very different affection from rust. In 1840, upon part of a field which I was preparing for wheat, too much putrescent manure was applied, which had been also marled the same year, the straw grew too luxuriant, and the grain was destroyed by mildew. The rest of the field ripened well, and was affected neither by rust or scab, producing eighteen bushels of wheat to the acre, and some part of it, by estimate, twenty-five.

My theory is, that the cause of rust is malaria. I apprehend when the stalk of the wheat attains that point at which the absorbents are in active operation, and the state of the weather such as to produce malaria, this poisonous element is taken up, and enters into the general circulation, and manifests itself upon the cuticle, as some diseases do on animals. Perhaps malaria produces its pernicious effect by obstructing the pores, but I incline to the opinion that it enters into the general circulation, from its appearance on the stalk. Observation has induced the opinion that excessive rains, though it causes the scab, does not occasion rust, if the weather be cool. Hot damp weather generates malaria; if it be calm, it rests upon the wheat, but brisk winds dispel it without injury.

The means of preventing rust, like the philosopher's stone, may be long sought, but I apprehend will never be found, unless the chemists, who are now concocting artificial manures, shall discover some antiseptic tincture or oil, to mix with their composition. Though this disease, like some other affections which proceed from natural causes, may be mitigated. In the high country, as far as my information extends, less injury is sustained than on low. There are in the former few sluggish branches, low wet grounds and swamps, to promote the accretion of malaria, and surplus rain passes off rapidly by the natural fall. Before last year, and one other, it is not in my recollection that the wheat on my farm has suffered injury by the rust. The soil is friable, the fresh water branches are narrow, the lands have been cleared to the river, and there is but little stagnant water in my immediate neighborhood. Ten miles up the country they have mill-ponds, extensive unreclaimed marshes, and much low wet grounds. Rust there is of frequent recurrence; which

strongly indicates the advantage to be derived from ditching, clearing and abating mill ponds.

Excessive heat, in combination with moisture, generates malaria. This state of the weather rarely occurs in this latitude before the 25th of June. If we could procure wheat adapted to our soil, which ripens about that period, little injury would be sustained from rust. Rare ripe, called in Virginia May wheat, so long as we grew it, was exempt. It was abandoned from failure in product. My general crop last year was red chaff. I sowed two and a half acres in the Mediterranean wheat, for experiment; it ripened six days earlier than the red chaff, was not affected by rust, and produced twenty-two bushels to the acre, weighing 60 lbs. to the bushel.

From the time wheat attains its full growth till it ripens, without reference to the weather in other respects, if there be a free current of air, I have never seen rust. Mr. Espy professes to regulate the rain; if he would teach us to raise the wind, and to keep it in free action, from the 1st of June to the 25th, he would render more essential service than by adjusting the waters of the Ohio, to navigable point, from the first of March till the last of December.

A publication in the Farmers' Cabinet, which you have translated to the columns of the Register, states that rolling wheat is certain destruction to the Hessian fly. Should this be found to be true, it is an important discovery. Wheat might then be sown early in September, an early harvest would be the general result, by which wheat would escape the rust, and in a few years the race of the Hessian fly exterminated.

I send you this article at your request, and as an evidence of the good will I bear the Register. My notions may be deemed visionary, but they are the result of my observation. I wish this subject may excite the inquiry of gentlemen more practised than myself. Wheat is the staple crop of the Eastern Shore of Maryland; of late years it has suffered from many causes, and I sometimes fear there is an undiscovered change in our climate unpropitious to its growth. WM. CARMICHAEL.

Wye, Queen Ann's Co., E. S. Md., March 7th, 1843.

ON WINTER FURROWS AND DRILL PLANTING.

Cambridge, E. S. Md., March 7th, 1843.

To the Editor of the Farmers' Register.

Having proposed to embrace in my late communication three interesting questions of agriculture, "surface manuring," "winter furrowing," and "drill planting," and having so far exceeded the limits I had allotted for the former, that I could not, without fatigue to the reader as well as the writer, accomplish the whole, I now, to verify the promise therein made, offer a sketch of my views and practice of the two latter, chiefly for the purpose of possibly exciting inquiry, and eliciting information, theoretic, as well as practical, by which we may finally arrive at their true solution.

My partial practice of this mode of conducting my (corn) crop, that is by "late fall" or "winter furrowing" and "drill planting," for about fifteen years, and my exclusive practice of it, for more than half that period; and my general course of reflection upon the *rationalia* in favor of it, have concurred to satisfy me by the general results, in various kinds of seasons, that it is the best mode of growing the most valuable staple of our section of country, (Indian corn,) and at the same time of sustaining, or improving the soil in which it is grown.

I would be understood in my remarks, to confine them to lands having a due proportion of alumina, and at least a moderate coating of grass or vegetable matters of any kind.

The method to which I refer is the following:

During the winter, or late in the fall, I lay the field under a true and well turned furrow, sufficiently deep to avoid re-turning the sward in the subsequent work. The accuracy of this operation will have considerable influence on the eventual management and success of the method. If the sward be well turned, there will be but little occasion for the hoe, to clear away the grass; as but little will vegetate from its inverted position. In this state, the whole will lie till the season of planting, when a light plough is skimmed over the surface in the direction of the first ploughing, if the soil be very tenacious, or if it be friable, a sharp cultivator may answer the purpose; the "corn planter" is then introduced, which furrows, drops, covers, rakes, and rolls the corn in one operation; all which may be done, perhaps as well in the usual mode, without that instrument, though I have witnessed for several years its expedition and neatness of execution; and equally so for turnips and other small seeds. F. H. Smith, of Baltimore, is the patentee, and Mr. Sinclair of the same city, I believe, the manufacturer.

The lines in which I plant are four and a half feet apart, and the corn is dropped at about sixteen inches distance in the line: this is the distance I prefer, though the machine may be set for any reasonable difference by enlarging or diminishing the axis.

When the corn is sufficiently up, a light double-furrowing, single horse plough is run as near the plant as possible, and throwing the earth from it; and in a few days the earth is returned. This is the whole of my ploughing. I had the plough for this last work made by Sinclair for the express purpose. Its *double* furrow is not more than equal to the *one* furrow of an ordinary plough, and therefore the portion of earth turned by each is so small as not to endanger the covering of the young plant. After this, follows the cultivator as lightly as possible, simply to keep the surface at all times loose, and open to the free access of sun and air, and the drier the season, the more frequently I use this instrument. The hoe is but little required in ordinary seasons, and the general cultivation is as level as practicable.

By the free admission of the fermentative agency of the sun and air, the inverted sward will make progress in repleting the soil with the soluble and nutrient gases; the product of its decomposition will combine and be detained by its union with the moisture and alumina of the soil, and this crisis will occur in time to meet the peculiar demands of the plant, whose organic structure and vital powers will enable it to seize upon, eliminate, and apply to its uses all those particles of bodies in contact, suitable for its aliment; either rejecting before its absorption, or excreting after it, what may be unsuitable; and ammonia, one of the last products of putrefaction, thus generated, and detained in the earth, will most especially supply the demand of the plant for nitrogen, at the period of its seeding; without which element, a deficit of frequent occurrence, the grain will not contain an essential constituent of food intended for animal sustenance.

The soil, too, is at the same time improved, not only by the *artificial fixity* communicated to these naturally volatile substances, the gases; but also by the salts, and alkalines of the putrecent sward, which will contribute something worthy of notice, not only for the present, but for the benefit of a subsequent crop.

To these considerations in favor of "winter furrowing," another source of repletion to the soil and the plant may be added, from the *atmosphere*, and possessing the more importance from the late researches of Professor Liebig, reported in his "Organic Chemistry," an intellectual production, which language cannot adequately eulogise for its boundless acquisition to the natural sciences, and its unspeakable benefit and advancement of the agricultural interests in particular.

By the culture contended for, the porous surface of the inverted turf is presented as a sponge to imbibe readily the ammonia daily escaping to the clouds, from dead bodies on the surface of the earth, and held in solution by the rain and snows which fall upon it, which (ammonia) upon good authority, (Professor Liebig,) is asserted, on actual experiment, to be in considerable quantities; and thus, the soil is prepared to receive and embody it, in a state of *fixity* for years, by means of its alumina, and other substances present in the earth, for the purposes of the present, as well as future vegetation.

Contrast, then, this method impartially, and free from the fetters of preconceived opinions, with the usual method of *spring* and *summer ploughing*, and *cross ploughing*, &c. &c.; and what are the disadvantages of the latter?

The sward recently turned down, is thrown back into its former position; the grass is, as it were, re-planted for future *hoe* labor, in as much as it had not remained in a condition to suffer decomposition; or, as far as it had undergone this process, so far it is wasted by exposure on the surface, to sun and air, the soil loses the whole of that source of fertility; it is dissipated in the wide atmosphere abroad, or if a small portion remain, it has not suffered that *befitting process*, which nature requires for the regeneration and supply of a new plant out of an old one; in fact, it is a total loss to the soil, and to the plant.

The atmospheric source is rejected, the hard surface, throughout the winter season, or the period it remains unbroken, is impermeable to the rain and snows, that are rich with *one* of the *elements* of *nutrition*, it is chiefly returned again to the clouds, from which it had fallen in abundance, for the want of access to the chemical forces, which would have arrested and detained it in the earth.

By winter furrowing too, the most tenaceous soils are easily reduced into a state of fine tilth for cultivation, when, by recent spring ploughing, they are difficult of reduction, and untractable.

By drill planting, much I think is gained; we may have, by it, more than double the number of plants that the usual method allows in safety, and leaving often two together, when they are nearly equal, and flourishing, the distances named will afford eight or ten thousand to the acre, and under the arrangement of the lines, north and south, and four and a half feet apart, they will have abundance of space for air and light.

My crops have not suffered from drought, as much as my neighbor's cultivated in the ordinary mode, which I attribute considerably to the continual flow of vapors, among the roots, from the fermenting mass below, promoted by the frequent use of the cultivator, preserving a friable, loose surface, and thus allowing the entrance of the *fermentative* agents; *heat*, *air*, and *moisture*.

Under the circumstances recited, my crops have reached, in different seasons, one hundred bushels shelled corn on one acre; four hundred and fifty on five acres; and seven hundred and fifty on ten acres, and so forth, as the seasons were more or less favorable; when my neighbors, under the usual method of cross-ploughing, &c. &c., have seldom obtained more than half those ratios.

Though perhaps unnecessary, yet I prefer to state, that the two latter results are on the records of the Maryland Agricultural Society, and premiums awarded, under the legal evidence very properly required by a general rule of the society. The first, the hundred bushel product, has a similar evidence inscribed upon a silver pitcher, taken on a sweep stake in Delaware; and my competitors, I am informed, all practised the cross ploughing method.

I have been thus minute, that I may be sustained practically, as well as theoretically, in the comparative advantages of my method; of which I entertain the fullest conviction.

As the fact of rain and snow holding ammonia in solution, is one of much agricultural interest, and of late discovery by Professor Liebig, I will add a few words on the subject.

Liebig states not only the *presence* of ammonia in rain and snow, but that it possessed an *offensive smell* of *perspiration* and *animal excrements*—vol. i, p. 75.

My incredulity of the latter property, when the substance had been sublimated, and passed through the wide expanse of the atmosphere, that it should retain the odour of its origin, led me to test it, to satisfy myself of the fact of the presence of the substance, as well as of its retention of this acquired property.

My first analysis was made rigidly under the directions prescribed by Liebig; and with about half a gallon of snow, I obtained some small crystals, which rubbed with hydrate of lime, gave a distinct effluvia of pungent, offensive ammonia, though colored and confused in appearance by the action of the acid on the copper vessel, in which it was performed.

In my second attempt, I avoided this inconvenience, by altering my plan of operating, by which I saved time and labor, and had a result free from any possible adulteration.

I filled my copper still, containing one bushel, with packed snow; I attached to the short pipe of the still, a glass receiver, into which I put the muriatic acid; the first passing over of the steam, would necessarily contain all the ammonia of the whole mass of snow-water, and it would be instantly *fixed* by the acid in the receiver; thus I had but a small volume to concentrate for crystallization, and *that* free from adulteration of any kind; whereas, Liebig's method of evaporating the whole mass of snow in a vessel with the acid, would take much more time; and the result would not be so certainly pure, or so accurate in quantity.

His method with the rain water, I think also exceptionable. In this he passed over a portion of the first steam into the receiver without *acid* in *either*; he then added the acid to the water in the receiver, and concentrated it for crystallization. It would seem quite certain that the small quantity of water in the receiver, thus charged with the whole of the gas before the admixture of the acid, might part with much of it, especially at its elevated temperature.

The result from my second experiment was a plentiful supply of perfectly inodorous muriate of ammonia, for the

most satisfactory examination; by rubbing it with hydrate of lime, fumes of pungent ammonia were disengaged, blended with a most intolerable carrion-like smell in its worst stage of putrefaction. The examination I repeated to satisfy myself and others, who happened to call in at the time. I felt the force of the motto, "cras credemus, hodie nihil," my incredulity was removed, and in the place of it, I possess a fact of great value, at least for myself, established, *one* that gives much additional force to the arguments I have used above for winter furrowing, and drill planting, as well as those in my former paper, in favor of covering quickly with the fresh sod manures applied to the surface. JOSEPH E. MUSE.

From the Plymouth, (Eng.) Herald.

PRACTICAL DIRECTIONS FOR THE PLACE AND MANAGEMENT OF THE DUNG-HEAP.

Farmers have generally found out the advantage of having a dung-pit instead of a dung heap; but still the rich drainage of the dung is much of it allowed to run away; the urine from the stables, &c. does not half of it run into the dung, though it is the best part, the essence of the whole; and the privy manure, which is better still, is mostly neglected altogether.

All drainings from the stables, cow houses and styes, should run into the pit, and the overflowings should be caught in another pit, to throw back in dry weather.

The following is a cheap and effectual method of doing all this:—When convenient, the pit should be on the north side of a wall, or of some trees, to shade off the sun; or under a shed, to keep off both the sun and rain; but these advantages cannot always be had without too much cost.

Having selected the best place for your pit, first lay in way soil, peat, or any soil as different as possible from that of your farm, and give it a hollow surface, like a great tea saucer. Upon this lay potatoe stalks, and any other vegetable matters, easy to ferment, and hereupon a layer of dung. Next a layer of vegetable matter, as peat, turf, bark, rotten weeds, ferns, leaves, or any kind of dead vegetable, to increase your quantity; and so every week, cover your dung from the stables, styes, &c. with three or four times as much dead vegetable manner; thus making up your heap in alternate layers. The urine should all run into the pit from stables and all, by narrow drains, where it will not be much exposed to evaporation; and another such drain should lead from it to a lower pit, to catch the overflowings when there are any; and keep them to throw back upon the dung in dry times. This lower pit should be deeper and smaller than the other, and must never be allowed to overflow, as that would be waste. It may contain cabbage stumps, and other things difficult to work, which may be thrown back upon the heap as they rot.

The lower pit may be used as a store of liquid manure, for watering your corn, in May or June; which gives it a start, and much strengthens its growth. In leaky ground the bottom of the pits should be *staunched* with clay, and stones or gravel stamped in, to harden it.

The privy should discharge into the large pit, if possible, or else into the small one; and coal ashes (but not wood ashes) are good to throw where this comes out—Saw-dust or turf dust from the stacks do very well—House-washings, as soap suds, &c. should also be thrown on the heap; but the wash of the country, and heavy floods of rain should not be allowed to enter it, but be led into the meadows by other channels.

In wet seasons, the top should be slanted to turn off the rain.

Each layer of dung being covered with a layer of peat or other dead vegetable matter, the whole heap, when finished, should be crusted over with way soil, or other earth, to retain the vapors.

The fermentation will be slower, or quicker, as it is more or less covered and compressed.

Wherever your heaps are made, whether in the yard or the field, give them a bed of some sort to absorb the drainage, and crust them over with soil, and mix all up with the dung before spreading. The drainage carries down the strength of the heap; sometimes enough to kill the seed in the place where the heap stood, whilst it would have been of the greatest benefit if spread out with the dung.

EXPERIMENT WITH SALT AS A MANURE FOR WHEAT.

In Johnson's Agricultural Chemistry, already mentioned, are contained some highly important experiments on wheat fields, by Wm. Fleming. Mr. F. gives the result of eight different kinds of manure on the eighth of a Scotch acre of wheat. The two most important are, Nitrate of Soda, 80 lbs., Rape Dust 5 cwt. to the acre, which produced 240 lbs. of wheat, weighing 62¼ lbs. per bushel, on one eighth of an acre.

Common salt, 160 lbs. to the acre, produced 219 lbs. of wheat, weighing 62¼ lbs. per bushel, on the same quantity of ground. While the same measure of land, without any manure, produced only 90 lbs. of wheat, weighing 61 lbs. to a bushel. The salt is therefore the most economical and productive manure used by Mr. F. in his course of experiments.

Five bushels of Liverpool salt to the acre is said to produce great effect on any crops, either of grass, grain or roots. More than six have been found to be injurious sometimes. The use of salt as a manure was early known by the Romans and other nations of antiquity, but has been little understood or practised in modern times. It is somewhat extraordinary that this important item in the cultivation of the earth should have gone into disuse on the sea coast especially, where the inexhaustible fountains of the deep are continually dashing their briny billows at the feet of the cultivator. But modern experience has demonstrated its usefulness, whenever it has been tried.

It is also destructive to insects, the greatest enemies of the vegetable kingdom; and if it had no power as a manure, this alone makes it more valuable to the world, than all the preventatives which the ingenuity of man has been able to discover against the innumerable hosts of these depredators, with which the earth is infested.

A thin sprinkling of green sea-weed, salt hay, sedges, or any other marine vegetable, on pasture, old meadows, or plowed land, contains sufficient salt to produce most surprising effects. if spread so sparse as to let the grass grow freely through it, and to admit the rays of the sun to the earth. Like every other powerful, concentrated manure, a *little too much* destroys vegetation for a time.—*Conn. Farmer's Gaz.*

SUBSTITUTE FOR THE ROLLER—One of our farmers, Mr. John A. Merselis, uses the following article, instead of a roller with good effect. He takes a slab, or outside cut from a log, 2 or 3 inches thick, 9 inches wide, and about 7 feet along; a rope is fastened in each end, then by means of the clevis, he fastens his team to the middle of the rope. If the driver is a heavy person, he uses the flat side down next the ground; if he is a light person, the round side down; going over the field several times, until the ground is sufficiently pulverized; the driver standing on it, to keep it in close contact with the ground. By rubbing over the ground, it pulverizes it thoroughly. The past season I saw two of his fields, one planted with corn on our Mohawk flats, which looked like a bed in a garden; the rows of corn could be seen across the field when only an inch or two high. The other was upland, clay and slate gravel, sown with oats, which was equally smooth. I believe when he uses it, he does not previously harrow. He invented it to cover marrowfat peas, which, by harrowing, he was unable to cover. He even uses it to cover his potatoes after planting them.

Schenectady, N. Y. CHAS. H. TOMLINSON.

EXERCISE—Many people look upon the necessity man is under of earning his bread by labor as a curse. But it is evident from the structure of the body, that exercise is not less necessary than food for the preservation of health: those who labor are not only the most healthy, but generally the most happy part of mankind. This is peculiarly the case with those who live by the culture of the ground. The great increase of inhabitants in infant agriculture every where, evidently proves it to be the most healthy, as well as the most useful employment.

Next to total abstinence from all intoxicating drinks, nothing contributes more to the preservation of health than early rising and exercise in the open air in the morning, when the air braces and strengthens the nerves—Custom soon renders early rising agreeable.

Every person should lay themselves under some sort of necessity to take exercise. Indolence, like other vices, when indulged, gains ground, and at length becomes agreeable. Hence many who were fond of exercise in the early part of life, become quite averse to it afterwards—This is often the case with gouty or hypocondriac persons, and frequently when their diseases are difficult to cure.

Indolence not only occasions diseases, and useless, to society, but promotes all manner of vice. The mind if not engaged in some useful pursuit, is constantly in quest of some ideal pleasures. From these sources proceed most of the miseries of mankind. Certainly man was never intended to be idle. Inactivity frustrates the very design of his creation, whereas an active life is the best and greatest preservation of health.—*Oracle of Health.*

WORMS IN TREES.

Our readers who neglected to attend to their apple, quince and peach trees, last summer, at the time we pointed out to them to destroy the worms, will do well to look to them immediately.

It will be recollected that the borer, which is so destructive to the apple tree and the quince, just buries itself under the bark during the first season; that in Oct last the brood which was hatched out in July had grown to be one quarter of an inch long—a white worm with a yellow head as hard as an Indian's.

Now these worms may yet be destroyed before they work into the body of the tree, if they are attacked early, before warm weather. They are now hid just under the bark, generally at the root of the tree, of the apple and quince. By scraping or by cutting through the bark, where the worms effected an entrance last summer, they may be exposed and destroyed. But recollect you must not attempt to destroy them by merely washing the tree, as you might have done soon after they were hatched; you must first expose them to view, then a wash of lie will kill them.

You will find it much more difficult to kill the worms now than at the time of hatching, but it will be easier to do it before they enter the sap wood than afterwards, and the tree will be less injured than by cutting them out of the wood.

It should also be borne in mind that the worms which were hatched summer before last are now in the heart of the tree. They will bore out in June, making holes 12 inches from the ground, in some cases resembling holes made with a gimlet. If you examine closely you will find them, in the latter part of June, lying at the mouth of the hole made for their exit, and waiting for nature to furnish them with wings.

It may not be of much service to meddle with this elder brood unless you wish to satisfy yourself, by actual examination, of the manners and habits of this most destructive worm. Let them come out, male and female, and be ready to kill their offspring as soon as they are hatched next summer.*

[*We think it would be better to kill all that can be discovered now, and then to transfer the war to the offspring of those which may escape—we believe in the old adage—a bird in the hand is worth two in the bush.—*Ed. Amer. Farmer.*]

RELIEF OF CHOKED CATTLE—A correspondent of the Albany Cultivator says—"It is not, I believe, generally known among farmers, that an ox or cow may be relieved in one minute from the danger of death and anguish of pain produced by a potato or any other thing lodged in the œsophagus, or passage to the stomach, by an operation so simple that any boy in his teens may perform it without the least danger to the patient. Take a common carriage whip, the butt or handle of which is an inch or an inch and a quarter in diameter, and smooth; let an assistant raise the head of the beast to be operated on, so high that the lower jaw will be parallel with the lower part of the neck; thrust the butt into the mouth, and push forward boldly but steadily, till you have pushed the potato or substance into the stomach. I feed my cows potatoes without cutting, as I have no fears of their being injured by choking, the remedy in that event being so simple."

POTATOES.—M. Auberi, of France, states, as the result of experiments continued through three seasons, that abundant crops of potatoes may be grown in poor clayey soils, by simply strewing the sets plentifully with rye chaff previous to covering them with earth at planting.

Professor Voelker, of Germany, covers his potato sets with a layer of tanner's spent bark, two or three inches thick, before turning a furrow over them. He says he thus provides a loose, spongy bed for the young tubes, prevents weeds from springing up and growing in immediate contact with the plants, and secure an abundant supply of moisture during the season, if but one soaking rain occur after planting, as the spent bark, covered by the surface soil, will retain water during the most protracted drought.—*Selected.*

THE AMERICAN FARMER.

PUBLISHED BY SAMUEL SANDS.

THE MEDITERRANEAN WHEAT—Having two years ago furnished J. B. Spencer, esq. of Queen Anne's co. Md., with a portion of what is termed the Mediterranean or Fly proof Wheat, we were anxious to hear how he succeeded with it—whether it was competent, as it was represented, *to resist the attacks of the Hessian Fly*, a quality it was said to derive from the vigorous growth of its roots. We felt anxious too, to know how it fared relatively with other kinds of wheat, with regard to the *Rust*—that destroying scourge of the wheat-grower. Upon both these points Mr. Spencer has given the results of his experience and observation, during two years culture.

There is one point of our friend S's. letter that we wish to correct. He says that we "are mistaken however about the fly not attacking it." We fear that we have been misapprehended upon this point. We *never* affirmed that the fly would *not attack* it; had we done so, we would have said that which was not borne out by the evidence of its character in our possession. What we have published about it claimed this quality for it—that, owing to its vigorous growth of roots, though, like other wheat, liable to attack, it was calculated to resist without material injury—that it possesses this quality, would seem to be established by the letter of Mr. S., which will be found in another part of our paper, and which we commend to the attentive perusal of our readers.

We are pained to find by the concluding paragraph of Mr. Spencer's letter, that the Wheat fields on the Eastern Shore have suffered severely by the *frosts of March*; for the disasters in the wheat crops in that quarter for a series of years have been ruinous in the extreme, and we had fondly indulged in the hope, that, with the blessing of Providence, the present year, by its bountiful production, would have tended to make up for the losses of the last one.

Our accounts from the western section of our state, and the neighboring counties of Pennsylvania, are far from being favorable for the wheat crop.

WINTER FURROWING, &c.—The letter of Dr. *Muse* upon this subject is worthy of special attention, as, to enlightened and scientific views, its author possesses the advantage of great practical experience.

THE RUST—The communication of the Hon. *W. Carmichael*, upon the cause of this disease, is as ingenious in its theory as it is happy in its diction. The subject is one of profound concern, and should elicit the attention of every farmer.

BUCKWHEAT—Persons who may be disappointed in their oat crop, owing to the difficulty of getting the ground ready, should lay themselves out to put in a heavy crop of buckwheat.

FRESHET IN VIRGINIA—We are pleased to learn from the most recent accounts, that the losses by the late freshets on the James and other rivers, have not been so great as were at first apprehended.

WINTER GRAIN—In various sections of country which we have heard from, great injury is apprehended to the winter grain crops from being killed out by the frosts—The season had not sufficiently advanced to form a correct judgment of the effects produced in some quarters whence we have received our information, and as there is a natural tendency in some men to look to the gloomy side of all questions, we trust that the fears, thus early entertained, may not be realized by actual results. That the *warm* weather of January, and the almost unexampled cold of March, have injuriously affected the growing crops of winter sown grain, we have no doubt, and as the extent of that injury, if known, would aid in fixing the value of last year's crops, now on hand, unsold, by the growers, we would thank our brethren of the type with whom we exchange, to make inquiries in their respective neighborhoods, and give the results of those inquiries to the public, through their respective journals.

ENERGY NEEDED—The inauspicious weather of the spring renders it necessary that you should arm yourself with *energy* and push ahead with your work.

NEW PEARS—Hovey's "*Magazine of Horticulture*" for April contains the drawings and descriptions of six kinds of pears recently introduced into Boston from Belgium and England. From these we give the following abbreviated descriptions:

1. The DUNDAS. *Van Mons.* It first fruited with the late Mr. Manning in 1841, but in greater abundance and far better perfection in 1842. It is represented as a beautiful and first rate variety. *Size*, medium, 2½ inches long and 2½ in diameter. *Form*, obovate, large at the bottom end, and slightly tapering to the stem. *Skin*, pale yellow, broadly suffused with very bright red on the sunny side; the surface covered with greenish black specks, a shade of russet at the base of the stem. *Eye*, small and sunk in a deep circular cavity. *Stem*, 1 in. long, stout, wrinkled, dark brown, and set upon the surface of the fruit. *Flesh*, yellowish white, fine, melting, juicy and rich. *Flavor*, perfumed and excellent. Ripe in October.

2. BOUCQUIA. *Von Mons.* The *size* of this is large, 3½ in. in length and 2½ in diameter; of pale yellow color, nearly smooth, with pale red on the sunny side; the surface covered with blackish specks, and occasional patches of russet. *Flesh*, yellowish white, melting, sweet and rich: flavor high, perfumed and delicious. Ripe in Oct.

3. ROSTIEZET. *Origin unknown.* An excellent fall pear, medium size, 2 inches long and 1¾ in diameter; oblong in form; skin yellowish, russety green, dull red sunny side, covered with whitish spots. Flesh coarse, yellowish, very melting and sweet. Flavor delicious, with a rich perfume. Ripe in Aug. and Sept.

4. The HAMPDEN BERGAMOT. *Lond. Hort. Soc.* This is a large pear, 2¾ inches long and 2½ in diameter. Form, reddish, tapering to the stem and slightly from the middle to the eye. Skin pale yellowish green, interspersed with small dark green points, occasionally with some patches of russet black blotches. Flesh very fine, white, buttery and sweet. Flavor, pleasant and rich. Ripe in August and Sept.

5. DE LOUVAIN. *London Hort. Soc.* Size, medium, 2½ in. long and 2 in. in diameter. Form obovate: skin smooth, uneven, light yellow, with considerable russet on the sunny side, the surface covered with brownish points; flesh, yellowish white, fine, melting, juicy and rich: flavor, musky, perfumed and delicious. Ripe in Octo. and keeps into Nov.

6. BEURRE *Bosc. Lond. Hort. Soc.* No pear of late introduction stands higher than this. It is of large size, handsome appearance and first rate qualities, it promises to be one of the best pears of the season; the tree is vigorous and produces its fruit *singly*, not in clusters. Size 4 inches long and 3 in diameter. Form, pyramidal, round at the base, suddenly contracted above the middle, and thence tapering towards the stem. Skin smooth, bright crimson russet all over, with occasional rough patches of a darker shade, and a few blackish dots. Flesh, yellowish white, fine, sugary, melting and buttery; flavor rich, with a slight cinnamon perfume. Ripe in Oct.

Mr. Hovey adds that "all these may be strongly recommended in every choice collection of pears.

CULTURE OF LUCERNE—We overlooked last week in answering the letter of our correspondent, *Wm. Cook*, esq. of Bedford, Va. that he had asked information upon the culture of Lucerne, and shall now supply our omission at that time.

The soils best adapted to its growth are, a deep dry loam—deep rich sand resting upon a porous bottom, or a gravel with a similar substratum. Either must be limed.

Preparation. It should be ploughed several times, at intervals of some days, in order to encourage the germination of weeds and grass seeds. Prior to the last ploughing, manure the ground freely, plough deep, and thoroughly pulverize the soil.

Time of sowing the seed. As early in the spring as the ground can be got in good order.

Mode of sowing. Either broadcast or in drills.

Quantity of seed per acre. If sown broadcast, the seed must be *lightly* harrowed in, so as not to bury them too deeply. If drilled in, the furrows must be about a foot apart, and the seed drilled in about an inch deep and tolerably thin. Finish by rolling in either case.

Kind of manure. It should be compost, or well rotted, wherein the seeds of weeds have been destroyed. An excellent compost might be made as follows: 2 parts ashes, 1 part lime, and 5 parts muck, mould from the woods, or rotten dung of any kind.

After culture. This consists simply in keeping down weeds, and occasionally, say every spring and fall, giving a top-dressing of ashes, or of such a compost as we have named above. Great benefit would result, too, from sowing a bushel of plaster per acre, every spring, just after applying the top dressing. A top-dressing consisting of 4 bushels of ashes, 4 do lime and 20 of good loam, if regularly spread, would serve for an acre of lucerne. Every top-dressing must be harrowed in.

☞Will our friends of the Richmond "Planter" forward us their April No. containing a description of their Straw Cutter? It has not reached us.

EXPERIMENTS WITH GUANO.

We are indebted to some unknown friend at *Patuxent Forge*, for a copy of the "*Supplement to the Liverpool Mercury*" of February 3d, containing accounts of an interesting series of experiments made in England with *Guano*. We commence their publication this week, and beg leave here to return to the gentleman who forwarded us the paper, our warmest acknowledgements. The experiments are eminently interesting, and establish the fertilizing properties of this truly valuable manure beyond all possibility of question or cavil. The reader will perceive, that, by one of the writers, *Guano* is considered to be of volcanic origin; but we believe the more generally received opinion, is, that it is the accumulated excrementitious deposite of sea-birds. But be its origin what it may, it is doubtless one of the most powerful fructifying substances ever used by the husbandman; we, however, fear the price at which it can be afforded here, will prevent its general introduction into our country, as the *first cost* is unfortunately held with too many to be the primary, if not the only question worthy of consideration, without paying due regard to the lasting properties of the substance itself. This is the natural effect of that indifference heretofore paid by our countrymen to all manure beyond what their own limited barn-yards, without extra trouble, may furnish. In England, the case is far different: there, the accumulation of manure is considered the *primary* business of almost every farmer, and, indeed, if it were not so, the occupiers of land would not, on account of its highness, ever be able to pay their rents. Many tenants in England, expend more, annually, in the purchase of manure, than would, in our country, buy out a free-hold estate of equal extent to those occupied by such tenants, and still, many of those tenants get rich after meeting those heavy annual outlays. *Here*, a tenant, except in the vicinity of some large city or town, never dreams of expending a dollar for manure made off the farm, or in extra labor in providing it from means within its limits. Indeed, an instance some years since came under our observation, of a farm, which, when the tenant first leased it, was fertile and productive, becoming, in the course of twenty years, entirely worn-out, although its shores were lined every spring and fall with deposites of sea-weed, which, because of the *trouble* was permitted to be washed away.

(*From the British Farmer's Magazine.*)

In your quarterly number for July, last year, pages 170 to 193, I presented your readers with the account of an interesting meeting of the County of Kerry Agricultural Society, from which arose the publication in this work of the best concentrated documents, analyses, and results, then known as to the new (but yet old) and celebrated natural production, used as. and *called* manure; the Spanish name for *manure* being *Huano.* This article has been used for ages by the ancient and present Peruvian agriculturists, and only imported into England the last eighteen months, during which time three thousand tons have been sold to manure the worn-out soils of England. This quantity has covered upwards of 40,000 statute acres. The north country graziers are putting fifty to one hundred tons on one farm. They declare it saves them five pounds per acre, yielding them twenty to thirty per cent. larger crops, and bringing them to maturity much earlier—so very desirable to the British farmer, in our damp and humid climate. Gnano sold at 22s. to 28s. per cwt. last year; it is now only 14s. to 15s. per cwt., and I believe even 12s. to 13s. per cwt. for large parcels, allowing a profit to the dealers. It is the most permanent fertilizer ever discovered; is chiefly aromatic; but the old deposits or strata, where found, are not so, the ammoniacal properties being concentrated and concreted. It remains for a long period of time in the land, and is not washed out by the rains; neither is it volatile, so as to rise into the air, as Professor Johnston, of Durham, states in his lectures on agricultural chemistry, consequently exercising a beneficial influence on the growing crops periodically, being a compound of nature consisting of the greatest variety of phosphates, muriates, urates, phosphoric, lythic, acids, organic matters, &c., of any article found in a natural state, all contributing food annually to the plants, as required by them.

From the numerous chemical ingredients composing the guano, no doubt it is of volcanic origin, in part; and as vegetation can only draw from the soil sufficient food in one sesson for its support, no more and no less, for its due developement, growth, and maturity, there is, of necessity, a supply of guano left in the soil, constantly drawing down from the atmosphere fresh ammoniacal life by the rains, which the "guanoical" particles keep in the soil, by means of their numerous inorganic matters, concretes, acids, &c., until it is wanted by the succeeding year's crop. So that one dressing of two or three cwt. per acre, (costing £1 10s. to £2.) will last many years, without further manure of any sort, by digging the soil over with a fork; and the agricultural Professors, Pusey, of Oxford, and Johnston, of Durham, recommended the guano manure to the English farmer, at 20s. per cwt. as being a permanent and excellent nourisher of the soil. At times it is worth 12s. per cwt. in Peru. About fifty ship loads have arrived in England, paying as high as even £6 per ton freight; and the total quantity imported to the present time is about 12,000 to 15,000 tons, 3000 tons being consumed during the last eighteen months. The quantity left for next season would not cover more than 100,000 acres; and I hear little more is coming, the loss being heavy. The farmer can scarcely expect it at a lower rate than it is at present; and if the London speculators get hold of the present stock, (and we understand they are in treaty for it all,) they may monopolize guano, and raise the price to double its present rate, as they did nitrate of soda three years back, when it may be adulterated, as nitrate of soda was at that time.

I would recommend every farmer to get it through a respectable agent in Liverpool, who will see that he gets the genuine guano, direct from the Queen's bonded stores, (as imported from Peru;) then he will have no fears of his crops failing, if properly put into the soil.

Guano is well suited to the humid climate of Great Britain, and especially Ireland, as by its peculiar chemical and attractive ammoniacal concretes and properties, it feeds the growing plants faster, which will enable the British farmer to get in his crops earlier; thus securing a longer period and many more chances of fair weather to get his produce from the ground. At all events, it is well worthy of further and extensive use. Farmers should not be so timid. A few pounds would secure acres of large and good crops. Guano is considered, by all the accounts I have heard or read, as a treasure in Peru, and one of the valuable gifts of Heaven, that enables to grow food for man and beast from the barren sea side, up to the rocky rude mountains, 5, 10, 12, and even 15,000 feet above the level of the sea. Without this guano, the Peruvians could not have raised crops to feed 15,000,000 of people that once inhabited Chili, Peru, &c. No doubt it must be one of the treasures of Peru, we say again, when the agriculturists there are complaining to the Peruvian Government, and protesting against its exportation, for fear they should be short of a supply. The English, they state, have taken all our gold, and now they are taking all our guano also. However, the Peruvian Government do not let it go for nothing; they have obtained £200,000 for allowing France and England to take it *for one year* only from their country. I understand the Belgian, Dutch, German, and French, agriculturists are using the guano manure formation, as well as our own farmers in England, Ireland, Scotland, and Wales, and that considerable shipments have been made to the West Indies, as well as the East Indies and St. Helena.

Guano is the best compound (a dry *compost*) fertilizer and nourisher of soils yet discovered, and can only be drawn out by the growing crops in a course of years. In Peru they have, in the mountains, almost perpetual humidity, rains and dews near nine months in the year, and the sun only shines at intervals,

It was stated in July last there were 3000 acres covering weekly, and that one and a half to two cwt. per acre was the only outlay necessary; the guano to be well mixed with clean yellow sea sand, ashes, old mould, charcoal, night soil, scrapings of the roads, and common deal or any kind of sawdust; four parts of any of these to one part of guano, to be well mixed, and the guano first be finely powdered, then to be thrown on the land, just before showers commence, broad-cast. In high districts, or dry weather, it is highly desirable, when convenient, and in all cases, to irrigate the land with a water-cart, that the guano may quickly get to the rootlets of the plants, as it can scarcely be put on the land in too small a quantity. In Peru they put it round the plant with finger and thumb, like pinches of snuff, (guano is very like snuff) and water it afterwards. In some cases it would be best to put it on in a state of solution; twelve gallons of water to four lbs. of guano, for hot and greenhouse plants, fruit trees, &c.

Naturalists disagree as to the origin of the guano formation. This is of little moment. In some parts it is like the sand of the desert, fine as the finest powder; in other islands, hard as the solid rock, twenty, thirty, and forty feet deep. In the soft portion, all sorts of animals burrow in it like rabbits, thus living and dying in the guano. It is the best compound in nature ready for the English farmer. Surely if the British farmer labour and toil to make his compost from his own stable and farmyard manure, he would prefer to give the finish and polish to the earth, to induce dame *nature* to give his increase in due season, rather than run the precarious risk of his own compost failing, either from its being washed out of the soil by the rains, or not being properly compounded for the crops he may require?

The results from guano are highly satisfactory for all crops. A more or less quantity may be put on any field, according to the kind of produce required, the soil to be manured, and the condition of the land. And every farmer should study these points: he should read works on agricultural chemistry, geology, meteorology, electricity, &c. as all the actions of nature, with the weather, I need not tell the scientific farmer, bear upon his success as an agriculturist. And if he will carry his business to perfection, he should consult his neighbour and medical man, on all intricate subjects, as he would in case of a disease amongst his cattle and stock, or if one was out of health in his own family.

Nitrate of soda is soon washed out of the soil, and exhausts the land in one season; but guano manure, that has all the phosphates and bone earth in it which nourish the earth, exercises a continuous influence on vegetation.

The following results have been collected since your last, and I shall follow them up in your next publication. I annex prices of the different manures, showing that guano is cheaper per acre than any other manure, and all the results state it yields more crops.

Guano, at 13s. per cwt. 2 cwt. per statute acre, is	£1	6s.	per acre.
Farm-yard manure, 6s. per load, 20 loads,	6	0	"
Poittevin's, 13s. per quarter of 8 bushels, 24 bushels,	1	19	"
Bone dust, 23s. per cwt., 3 cwt. per statute acre,	3	9	"
Nitrate of soda, 20s. per cwt., 3 cwt.	3	0	"

RESULTS FROM GUANO.

(*From the Gardener's Chronicle, 3rd December, 1842.*)

POTATOES.—*Henry Ford, Sheaf House, Sheffield.*—I beg to forward the results of some experiments on potatoes, with guano and other manures. The piece of ground operated upon was rather more than a rood of light loamy soil, with a gentle declivity to the south. It was ploughed up in 1841, and sown with oats; but it was so poor and full of couch grass, that at harvest time there were scarcely any oats to be seen. In March last I ploughed it twice, cleaned the couch well out, and cut the rows with the plough two feet apart; I planted the whole with potatoes—the kinds being American natives, Prince Regents, short-topped reds. These were cut into sets of two eyes each, and planted seven inches apart lengthways in the rows, which ran north and south, the rows being all fifteen yards long. I manured them alternately with one pound weight of guano to each row, for five rows, drilled out of the hand on the sets, and covered with mould; five more rows with a pound weight of nitrate of soda to each, put on in the same manner; five more with good stable dung; the same number with horn shavings; and so on alternately with the respective kinds, until the whole were finished and planted; two rows of each sort being left without manure of any kind. The whole were managed exactly alike as to hoeing and earthing up; the quantity of the ground was also as regular as possible, because I planted a row in the middle and at each end, of the same potato, without manure: each yielded the same weight, which I think was as fair a trial as I could possibly give. The result of these experiments is as follows:—The nitrate of soda was delivered to us at 27s. per cwt.; the horn shavings, about 12s. per cwt.; and the stable dung at 6s. per ton. Every row of short-topped reds, manured with guano as above, yielded, on an average, one bushel each; those with stable dung, three pecks each; those with horn shavings, very little more than two; and those with nitrate of soda, the same as the horn shavings; those with no manure at all, were equal in weight to the two last. The rows planted with American natives, and manured with guano, yielded on an average three pecks each; those with stable manure, a quarter of a peck less; those with nitrate of soda and horn shavings, two pecks each; those with no manure at all, rather more. The Prince Regents yielded, as near as possible in quantity to the short topped reds, with all the manures. Those grown with nitrate of soda and with horn shavings, were all extremely scabby, but during their growth in summer they were of a much darker green than any of the others, and the haulms were at least a foot longer: I anticipated the best crop from them, and did not find out my mistake until they were taken up. Those grown with guano and stable manure, were beautifully clear skinned, and free from scabs; one ton of dung from the stable manured twenty rows, which cost, with carting, 7s. 6d.; while the quantity of guano for the same ground would be considerably less, with much less trouble in applying it; several sets of the kinds manured with nitrate of soda did not come up, so that it would seem to have destroyed the eyes. The potatoes which were planted without any manure at all were better than those dressed with nitrate of soda and horn-shavings, insomuch that they were not so scabby, although there were a few bad ones amongst them."

William Deans.—"I can state, on the best authority, that 2 cwt. of the best gray-colored guano is a sufficent quantity for an acre of turnips. The best article with which to mix and make it fit for sowing, is four bushels of sifted coal ashes to 2 cwt. of guano, which will divide and make it scatter evenly in the drills. From all the trials which have been given to it in this neighborhood, it is much cheaper and greatly superior to bones, gypsum, or even the best stable dung, for turnips. The demand will be very great for it next season in Roxburghshire."

Clericus, F. H. S.—"I have watered camellias and chrysanthemums regularly with liquid guano manure, with the greatest success."

Liverpool Courier.—"GUANO.—We are happy to hear from our agricultural and horticultural friends that this new manure, which was tried in our neighborhood last year, for the first time, with such favorable results, has again proved itself to be one of the most valuable manures ever introduced either for field or garden crops. It has been used to a considerable extent in this country, both in a dry and liquid state, and in every instance, when properly applied, has answered well for all crops of every kind. It has also been proved to be a lasting manure, for very good crops have been obtained without any manure whatever from land where guano was applied and yielded good crops last year. Our farmers and gardeners have no doubt much to learn with regard to the proper quantity to be

used of this new manure: but as a great many experiments have this year been made with it, we may expect this point will soon be settled. Guano has been applied in this neighborhorhood on wheat and other crops, and on grass lands as a top-dressing, at the rate of 2 cwt. per statute acre, with most excellent effect. For turnips, 4 cwt. have been used to the acre, and given very good crops; and from 4 cwt. to 6 cwt. to potatoes, with like success. In the gardens and nursery grounds guano has been applied in a liquid state, and in that manner has surpassed every manure yet discovered. Its effects on young fruit and forest trees are wonderful; also upon hot-house and green-house plants of every description; even the exotic heaths, to which manure of every kind has been considered injurious, seem to flourish in a manner beyond precedent, when watered with it. About 4 lbs. to 12 gallons of water is enough for hot-house and green-house plants: the water should stand 24 hours before use, and when drawn off, 24 gallons more may be put to the same guano, and the guano is good for the land afterwards."

LANDSCAPE GARDENING.—The last number of the North American Review contains an interesting article on the subject of Landscape Gardening. The following extract is worthy of attention:

"When a new sensibility is thus awakened to appearance within the dwelling, he will begin to look around and around it with more discrimination than before; and, if the sunflower and peony are near neighbors to the daisy and heliotrope, in his garden, he will begin to inquire within himself, whether either gains any real advantage from the immediate vicinity of the other. So, too, with the foilage of the trees to be near. He will begin to notice the graceful dignity of the elm, the firm grandeur of the oak, the tender gloom of the evergreen, and the pensive leaning of the willow. Where, in former days, he saw nothing but fuel and timber, he will find value, apart from domestic uses, in the expression of their forms, and the images which they awaken in the mind. Nor will it be long before he undertakes by his own efforts, to produce those combinations which make the most pleasing impression. He will ascertain by experiment, where the rich velvet of the locust, the cheerful green of the plane-tree, the autumnal scarlet of the maple, and the blood red of the oak, can be set with the effect. Without any interference with his graver cares, indeed with a recreation, which gives him more energy for those pursuits that exhaust the frame of the mind, he can go on with his work of improvement, which in every sense deserves the name, since he refines his own taste, and quickens his sensibility, not only to external nature, but to every thing in the moral and intellectual world. Even if he gained nothing for himself, but the satisfaction which it is sure to give, his children will grow up with tastes and perceptions, to which his early days were strangers; and all experience is false, if they are better, as well as happier, in consequence of these powers and affections, which, growing with their growth, and strengthening with their strength, will act with commanding influence on their destiny; not to make them artists or amateurs, but to raise them to the high standing of refined and cultivated men. Well may they congratulate themselves on such an inheritance. It is more than wealth can bestow. Such a home is one of the dearest recollections they can carry with them through life; and when they die, it is the last earthly vision which fades and lessens upon their hearts, as they depart to the land of souls."

Management of Bees in the Spring.—If the hives are kept in the shade, and where it is rather dark, bees will not attempt to go out till they can do it with safety; but if the sun shines on the hive, it makes a milder climate in and around the hive, than there is out in the fresh and chilling breeze, and the bees will be induced to go out when it is too cold, and becoming chilled they fall on the snow or cold ground and die by thousands; and by these revivals they will be more in action and consume more honey.

In the spring, when warm weather commences, or just before, if any one can guess aright in such a season as this, take out the board on which the hive sets, scrape off all the dead bees, &c. and wash it thoroughly. Then let it dry and wash it over with a whitewash of lime, with a good lot of salt in it, even more than will dissolve. Whitewash also the lower edge of the hive, and up in the hive to the comb. This whitewash is very acceptable to the bees and they will eat it freely.—*Boston Cultivator.*

COMPARATIVE NOURISHMENT OF DIFFERENT VEGETABLES—If, as an article in the last Cabinet, signed *Vir*, states, "the differences of opinion with regard to the value of root crops, as cattle feed, are indeed about as different as light is from darkness," the following table, showing the comparative nourishment of some of the principal kinds of vegetable food, may possess interest. The table was formed by Boussingault, an eminent French chemist—and he tells us that he compared the result of his experiments with the practical experience of farmers in feeding cattle, and found "a most remarkable coincidence between the theoretical and practical inference." The table is from a late number of the Boston Medical and Surgical Journal, and is as follows:

White French beans,	100	Farina of barley,	212
Yellow peas,	120	" of potatoes,	225
Farina of cabbage,	148	Barley,	232
" of carrots,	170	Indian corn,	246
" of wheat,	175	Potatoes,	1096
Wheat,	191	Carrots,	1361
French wheat,	193	White cabbage,	1446
Rye,	200	Turnips,	2383

"Thus we see that 100 parts of white French beans are equivalent in nutritive power to 110 parts of yellow peas—to 1096 of potatoes, and 2383 of turnips. A farmer, for example, in feeding cattle, would find that 420 parts of yellow peas, would go as far in keeping up the strength and efficacy of his cattle, as 2383 parts of turnips. Or it would require more than 23 bushels of turnips, or 2 bushels of rye, to be equal in nutritive power to 1 bushel of white French beans.

These statements, it is believed, may be relied upon as approximating the truth; though the fact, that it should require nearly 2 bushels of wheat to equal in nutrition one of beans, may be a little too many. When *farina* is given, as of cabbage, potatoes, &c. the meaning is, that the article was dried and reduced to flour, by grinding, or otherwise.

Far. Cab. INDEX.

CLOVER FOR MANURE.—Although the custom of turning in a clover ley for manure is of long standing and very prevalent in many places, and altho' every farmer has heard and knows something about it, yet it is not very much practised in Maine. There are several reasons we suppose, why it has not yet become so prevalent as it should. In the frontier parts it is getting to be an object for farmers to sow their clover on new lands and cut it after it has ripened its seed for the purpose of obtaining it for market; northern clover seed commanding a good price and ready cash sales. The land being new and not exhansted the farmers conceive it more for their interest to save all their clover for this purpose rather than to plow it under, and when it fails, turn the land out to pasture and clear up more for succeeding crops. In the vicinity of towns it is tho't to be more profitable to cut and cart the hay to market and turn other matters into manure or to purchase it from the stables in town. Others think they cannot afford the expense of turning in a good crop of clover, and others are faithless in regard to the advantage to be derived. Some content themselves with plowing under clover stubble, and a few put in the plow when the clover is in its glory and bury it well, where it becomes a magazine of nutriment for future crops, and we have no doubt they reap a rich reward for their generosity to the soil.

Innumerable instances of the profit arising to the farmer from this mode of dressing land could be adduced. We wish to call the attention of those farmers who have never tried it to the subject.

Hear what John Lorain saith.

"Agriculture will never reach its zenth, until the value of grass lays is sufficiently appreciated, and the cultivation of them much better understood. The value of a clover lay, when applied for wheat, is well known. Still most farmers continue frequent mowing, or close pasturing, until the clover is nearly run out. This greatly impoverishes the lay, and unless the soil be rich, the wheat crop is light. The clover plant cannot withstand frequent cutting, even during the first season it is mown. This causes the lateral roots of the plant to become weak, and incapable of holding the tap-roots in the ground; and they are thrown out by the frosts of the ensuing summer and winter. The same happens if red clover be pastured, unless a well grown covering of the tops of the grass be preserved; especially to defend the roots and crown of the plant, from the frosts of the ensuing winter and spring. If this plant be thus defended, it will far better withstand, not only the frosts in the winter and spring, but also the injurious heat of the sun. * * * * * * * *

I will commence it by observing, that the cultivator should never forget, that fallow crops ought to be invariably grown on speargrass or clover lays, whenever it can be done. This will be always practicable, after his grounds have been reduced to a proper system of management.

Both clover and speargrass lays are excellent for fallow crops; but the latter is best for this purpose, as it may be kept much longer, without danger of the grasses running out. * * * * * * * *

The roots of these grasses, when turned up for crops, seem to sink slower into decay; of course are better calculated to extend the advantages derived from them to succeeding crops: but as reversing the roots of red clover quickly and effectually kills the plant, it forms a much better lay for wheat and other small grain: especially when they are sown broad cast. When the soil is rich, or a sufficiency of enriching manure can be applied for the fallow crop, to insure a luxuriant growth of the speargrass, they should be sown to form a lay for the ensuing crop of the same description; unless clover be sown with a view to the destruction of weeds. When the speargrass form a lay for the fallow crop, and clover for the wheat or other small grain, a change in vegetation is introduced, which greatly favours the product of the crops.*

It clearly appears from the economy of nature, as well as the practice of husbandry, that the soil becomes tired of growing the same plants too long. The cause of this is not certainly known, but it seems probable, as some plants are deficient in matters which other plants possess more abundantly, that it is by the decay of different plants, or such parts of them as are not removed, that the different fertilizing principles are best blended with the soil. As plants, as well as animals, may, to a certain extent, have the power of selecting such food as suits them best, this also may operate against growing the same plants on the same soil, without proper intermediate change in vegetation."

*If the ground be sufficiently rich to grow speargrasses and farm yard manure is plenty, and these grasses suit the cultivator best, the change in vegetation may be readily effected by growing different varieties of them.

ANJOU CABBAGE.—An excellent vegetable both for the kitchen and the food of cattle.

The great Anjou cabbage, said the Marquis de Turbilly, is one of the most useful leguminous plants for country use. It will grow in almost any soil, not excepting even the most indifferent, provided it be sufficiently dunged. The seeds of this cabbage are commonly sown in June, in a quarter of good mould, in the kitchen-garden, and watered from time to time in case of drought. The plants will rise pretty speedily, and should be thinned soon after, wherever they stand too thick. The next care is to keep them free from weeds whilst they continue, by hoeing the ground between them. About the first of November (probably September or October would be better in this climate), they should be transplanted into the field where they are to remain. They should be planted there in trenches dug with a spade, pretty deep; that is, they should be buried almost up to the leaves. The distance between them should be two feet or two feet and a half every way, according to the soil. Particular care should be taken never to plant them with dibble, as gardeners plant other sorts of cabbages. A layer of dung should be spread along the bottom of the trench, and the roots of the transplanted cabbages covered therewith. The mould taken out should then be returned back upon the dung; and, as the trench will then no longer hold it all, there will remain a ridge between each row of cabbages. Towards the middle of the ensuing May, the ground should be well stirred between the plants with a spade, or some other proper instrument, and its whole surface laid quite level. After this, nothing more remains to be done, except pulling up the weeds, from time to time, as they appear.

In the month of June, such of these cabbages as are already large, and do not turn in their leaves for cabbaging, but still continue green, begin to be fit for use, and soon arrive at their full perfection, which they retain till the next spring, when they begin to run up, and afterwards blossom. Their seeds ripen towards the end of July, and what is intended for sowing should then be gathered. In Anjou, when these cabbages are entirely run up, they generally grow to the height of seven or eight feet; some-

times they reach to eight feet and a half, or nine feet; nay, some have even been seen of a greater height. From the month of June, when these cabbages begin to be fit for use, their leaves are gathered from time to time, and they shoot out again. They are large, excellent food, and so tender that they are dressed with a moment's boiling. They never occasion any flatulencies or uneasiness in the stomach; and are also very good for cattle, which eat them greedily. They likewise greatly increase the milk of cows. Such are the properties of this kind of cabbage, which is greatly esteemed in the districts formerly denominated Anjou, Poitou, Brittany, Le Maine, and some other neighbouring provinces. In the first, farmers were formerly bound by their leases to plant early a certain number of these cabbages, and to leave a certain number of them standing when they quitted their farms.

PRUNING FRUIT TREES—Fruit trees should be carefully pruned, perhaps as well in April as any time, so as to let in the sun and air and prevent limbs riding and chafing each other. Old trees which have begun to fail, are often benefitted by pruning off much of the top. Fruit is higher colored and flavored where the sun and air have free access. The Baldwin, grown in a thick top, is often mostly green, when if grown in an open top or exposed to the sun, it becomes a bright red all over.

Limbs should be cut off close to the main stock and smooth, then they soon heal over; otherwise the bark makes an effort to grow over and fails. The consequence is, the stump left long, rots, and you soon have a hole in the side of the tree. Fruit grows larger and fairer on trees which are well pruned, and the trees themselves present a darker green and more healthy color. However, fruit trees require manure and careful cultivation as much as the corn or the wheat crop.—*Boston Traveller.*

Farmers should plough deep, and manure well, if they wish for good crops. The hard pan and subsoil, broken up and brought to the surface, will soon become fertile and productive.

BALTIMORE MARKET.

Cotton.—We note sales this week of 50 bales Upland at 6¼ cts cash; of 130 bales Upland at 6 5 8 cts on time; of 70 bales Louisiana at 7 cts on time; and of 140 bales Upland at 6¼ cents, 6 months.

Clover seed.—We are not advised of any large transactions in Cloverseed during the week. Retail sales of prime parcels are making from store at $4,75a5, and of fair quality at $4,50 per bushel.

Timothy seed.—We quote the store price of Timothy seed as before at $1,87½ to $2,25 as in quality and quantity.

Sugars.—At auction on Wednesday 95 hhds New Orleans were sold at $5,25a5,45. At auction to-day 130 hhds Porto Rico were sold at $6,35a$7,25; and 20 hhds New Orleans at $4,90a4,95—We quote the range New Orleans at $4,75a5,75.

Tobacco.—The demand for Maryland Tobacco has been quite active throughout the week for the better descriptions, and the transactions have nearly cleared the market of all the Tobacco, besides taking off much of the old crop remaining on hand—The stock, which is now very small, is composed almost entirely of inferior and common qualities, which are dull, and can only be sold in connection with better kinds. The prices of the good descriptions have been fully sustained, and in some instances a slight improvement has taken place, but the common sorts sell at about the same rate as last week. We quote inferior and common Maryland $2,50a3,50; middling to good $4a6; and fine $8a12. In Ground Leaf there has also been some activity, and the stock of this description is much reduced.—The demand is principally for the finer sorts. We quote as before at $3a4 for inferior and common; and $5a7 for middling to good. Ohio is also in demand, but the stock is so light, particularly of good descriptions, that the transactions were limited. Several parcels are now on the way to Baltimore. We quote as follows:—common to middling $3a4,50; good $5a6 fine red and wrappery $6,50a10; fine yellow $7,50a10; and extra wrappery $11a13. The inspections of the week are 420 hhds Maryland; 23 hhds Ohio; and 15 hhds Kentucky—458 hhds.

Cattle—There were only 114 head of Beef Cattle offered for sale this morning, of which 102 were sold at prices ranging from $2,50 to $3 per 100 lbs on the hoof, which is equal to $5a5,75 net as in quality. The balance remain unsold.

Flour—We note sales of two or three hundred barrels Howard street Flour of good mixed brands from store to-day at $4,18¾, which is a slight decline. Some holders are offering to sell at the same price now, while others continue to ask $4,25. There is no fixed receipt price.

We hear of no transactions in City Mills Flour—Holders ask $4,50 for fresh ground.

A sale of 100 bbls Susquehanna Flour on Saturday at $4,28. Sales of Rye Flour at $2,75.

Grain—There is no change in the price of Wheat. A few lots of common to fair Md. reds were sold to-day at 75a92 cts and one parcel of prime at 98 cts.—Sales of yellow Corn at 53 cts, and of white at 52a53 cts. A sale of Eastern shore Md Rye on Saturday at 48 cts. Sales of Md Oats at 27a29 cts.

Provisions—The demand for Bacon continues good, and sales are making pretty freely at our last quotations. We note a sale of 850 Kentucky Hams to-day at 6 cents full. We quote as before Western assorted at 4¼a4¼ cents; Sides at 4¼a4¼ cents; Shoulders at 3¼a3¾ cents; Hams at 6a6¼ cents; Baltimore cured Hams at 7¼a8 cents; and Sides and Shoulders at 3¼ cents. We are not advised of any sales of Beef or Pork to-day. There is but little Pork in the market. One small lot of Mess is offered at $10,50, other holders are asking $11. We quote No. 1 at $10 and Prime at $9; Baltimore packed Mess Beef is held at $9a9,50 and No. 1 at $7,50a8. Western No. 1 Lard is firm 7 cents in kegs.

CHEAP HATS! CHEAP HATS!
TO FARMERS AND OTHERS!!
RESIDENTS OF THE COUNTRY!!!

It is generally a well known fact that when gentlemen from the country visit our city to purchase necessaries they are invariably charged heavy prices from a supposition that as they are what is termed

"COUNTRYMEN,"

they do not know the prices of goods. Now we beg to call the attention of gentlemen visiting the city to

MESSRS. W. H. KEEVIL & CO'S.
CHEAP HAT STORE,
CORNER OF BALTIMORE AND HOLLIDAY STREETS,

who have been established for six years, and are selling Hats of all kinds at ONE DOLDAR LESS than is charged by others for a fine article, as follows:

Fine Silk Hat (fur body)	$2 50
Fine Russia	3
Fine Nutria Nap	3 37½
Fine Cassimer,	3 50
Best quality Nutria Beaver,	4

All Hats purchased from

MESSRS. KEEVIL & CO.

are warranted to be well made, to be water proof, and according to the excellent quality of the hat, to be One Dollar less in price than is charged by others, or no sale.

Please remember the name,

KEEVIL & COMPANY,
74 BALTIMORE ST. CORNER OF HOLLIDAY ST.
Next door to W. H. Bayzand's Cheap Clothing Store.
ap 26 7t

BARNABY & MOOERS' PATENT SIDE-HILL & LEVEL LAND PLOUGH.

To which was been awarded the following and Several other Premiums, viz.—By the American Institute, at their Ploughing Match at Newark, N. J. 1842, the First Premium, a Silver Cup—and at their Annual Ploughing-Match for 1841, at Sing Sing, N.Y. a Gold Medal for the best work done, lightest draught, and best principle of construction.—answering for "general purposes." The N. York State Agricultural Society, awarded it an Extra Premium of $30, at their Annual Ploughing-Match at Syracuse for 1841.

The following are its advantages over the Common Plough, viz.—1st. Ease of Draught—2d. Perfection of Work—3d. Strength and Durability—4th. All Dead Furrows may be prevented, as the Furrows can all be turned one way—5th. Any width of Furrows may be turned, between 8 18inches, by moving the catches in the cross piece towards the handles for a wide Furrow,—and towards the centre for a narrow one—6th. Placing the beam in the centre of the cross-piece, makes it a "Double Mould-Board Plough," turning a Furrow both ways at the same time,—answering for Green-Ridging, Ploughing between Corn and Potatoes, or any any crop cultivated in rows or drills,—and for Digging Potatoes.

The subscribers having purchased the Right to Manufacture the above celebrated Ploughs, for the State of Maryland, are now prepared to furnish Farmers with the same,—and they pledge themselves to the Public, to mannfacture this Plough in the Very Best Manner, both as to materials and workmanship. ☞All Orders will be thankfully received and punctually attended to.

☞Price as Follows, (adding Transportation.)—No. 2, 45lb. at $7. No. 3, wt. 70 lbs. $10—No. 4, 80 lbs. $11—No. 5, 90 lbs. $12. Extra edge, 50 Cents. For Colter, if added, laid with steel, $1.50. Wheel, $1,50. Shin Pieces, 12½ Cents.

DENMEADS & DANIEDS, corner Monument and North-sts. who having purchased Mott & Co's interest, are now sole owners.

B. H. WILSON, No. 52, Calvert st. 1 door below Lombard, is Agent for the sale of the above Plough. Baltimor8s, Nov 23, 1842

A SITUATION AS OVERSEER,

Is wanted by a single man, who can produce the highest testimonials of character and ability, and who would be willing to go to any part of Maryland or the neighboring states. He could enter upon his duties immediately. Apply to S. Sands, at the office of the American Farmer. ap. 12 3t*

LIME FOR AGRICULTURAL PURPOSES.

Having accumulated a large stock of first quality Oyster Shell Lime, at my kilns on the Potomac River, I beg leave to say to the Farmers and Planters generally, and more especially to those who are anxious to improve their lands, and have been deterred from doing so by the scarcity of money and low prices of their produce, that I will sell them lime, delivered on board of vessels at the kilns, either at Lancaster's Tide Mill, near the mouth of the Wicomico River; Lower Cedar Point, or Pickewaxin Creek, at 6½ Cents per bushel, payable March 1st, 1844, (if ordered, deliverable between this date and 1st of August next,) or I will deliver it on the above terms, charging in addition the customary freight, which must in all cases be cash. Orders addressed to me, at *Milton Hill Post Office, Charles County, Md.*, will receive prompt attention rom

WM. M. DOWNING.
ja 25 6m

HUSSEY'S REAPING MACHINE.

Farmers are respectfully requested to send their orders as soon as they shall have decided on procuring machines to cut the next year's crop: by doing so, they will enable the subscriber to make preparations early in year with confidence, so that none may be disappointed at harvest time, as has been the case for several years past by delaying to apply for them in season. His former practice will be steadily adhered to of making no more machines than are ordered, lest a failure of the next years crop should leave a large number on his hands, unsold, which his circumstances will not allow. It is hoped that the great success which has attended the machines made for the last harvest will remove every doubt of their great value. Several persons have cut as high as 20 acres in a day with the last improved machines, while one gentleman with one of the old machines cut his entire crop of 72 acres in less than five days, without having a cradle in the field.

The greatest objection ever made to the machine was its heavy bearing on the shaft horse; this has been entirely removed by adding a pair of forward wheels to support the front of the machine, and a driver's seat at an extra expense of 20 dollars.

CORN & COB CRUSHER

The subscriber's Corn & Cob crusher which obtained the firs premium over several competitors at the late Fair of the N. York State Agricultural Society held at Albany, N. Y. and is so highly recommended in the public prints, by farmers who have used them, will be kept constantly on hand for sale.

no 9 OBED HUSSEY

☞PRICES TO SUIT THE TIMES.☜

A. G. MOTT & CO. corner of Forest and Ensor sts., and corner of Wood st. and Bowly's wharf, manufacture and have for sale Agricultural Implements of various kinds—consisting in part of WHEAT FANS, GRAIN CRADLES, SCYTHES, MOWING SNEATHS, CORN SHELLERS, HAY & STRAW CUTTING MACHINES, CORN & TOBACCO Cultivators with wrought and cast tines, or hoes; the castings of the N. York composition metal. The celebrated endless chain Horse power & Thresher, single and double shovel ploughs, Harrows of various kinds.—Also a variety of Ploughs among which, being the only agents in this State, is the renowned WILEY, the castings for which are from the North, and are the best and most durable in the country, one share wearing as long as two of the Baltimore make. At the great Ploughing Match, during the last annual meeting of the Baltimore County Agricultural Society, the WILEY took the sweepstake, by acclamation, having for competitors, ploughs from the different Factories in this city,—also from Pennsylvania, New York and Ohio, among which was the Messrs. Witherow & Pearce's Cycloidel Plough of Gettysburg, Pa. This Plough is so constructed that with it the farmer is his own smith. The double pointed shear is confined to the mould-board by a cap—the shear when one point wears dull, can be reversed by unscrewing the cap and throwing out the other point. The prices for the No. 3, a 7 inch seeding plough, $4,50—No. 4, an 8 inch, $5,25—No. 56, a 10 inch, $8—No. 76, $9—No. 8½, 10. The following practical farmers residing in Baltimore Co. are a few of those who use the WILEY ploughs exclusively, and pronounce them the cheapest and best which they have ever used, viz:

Hon. J. T. H. Worthington, Elisha Johnson,
John Johns, Richard Johns,
Thos. T. Griffith, Edward Philpot, &c.

Also a choice selection of FIELD AND FLOWER SEEDS, which are warranted fresh and genuine. mh 29

EASTMAN'S NEWLY INVENTED
PLOUGH WITH CONCAVE LANDSIDE, AND DOUBLE SHARE.

The subscriber has just invented a PLOUGH, with the above named peculiarities, viz: *with a concave Landside and double share.* The advantages to be derived from these improvements are expected to be as follows:—1st, That it will be kept in repair at considerable less expense than other Ploughs in use:—2d, That it will run more level either in deep or shallow ploughing:—3d, He believes that it will run much lighter to man and horses than any other Plough in use. With these advantages they are offered to the public, and if they are not realized to the purchasers after two days use, or they are not satisfied with them, they are requested to return them and receive their money back. The only size I can furnish at present is a large two horse Plough, the size of the Davis' 10 inch, as made by me. J. S. EASTMAN,

Pratt street, between Charles and Hanover sts.

TO FARMERS.

The subscriber has for sale at his Plaster and Bone Mill on Hughes street, south side of the Basin, GROUND PLASTER, GROUND BONES, OYSTER SHELL & STONE LIME, and LEACHED ASHES, all of the best quality for agricultural purposes, and at prices to suit the times.

Vessels loading at his wharf with any of the above articles, will not be subject to charges for dockage or wharfage

fe 23 WM. TREGO, Baltimore.

DURHAM COWS.

The subscriber will sell two young Durham Cows, raised by himself from the best milking stock in Maryland—their dam gave 6½ gallons milk daily for three months after calving from which 11 lbs. butter per week were made. They will be sold low. Enquire of A. B. KYLE, No. 2 Pratt st. whf.

ap 26 3t*

MINGO CHIEF,

Will make his second season in Maryland, and be let to Mares at the Farm of Mr. J. P. E. STANLEY, 4 miles from Baltimore, on the Frederick road, at Eight Dollars for each mare.

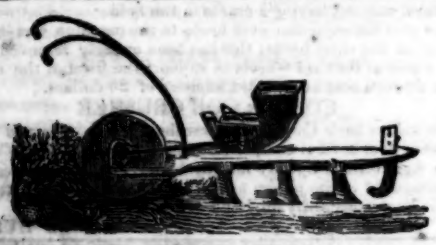
MINGO CHIEF is 6 years old this spring, near 15 hands high, of a rich brown color, perfectly formed for speed and action, goes all gaits naturally, and is very fast under the saddle, well known at Montreal as "La Belle Poney."

Mingo Chief was got by an Indian horse (grandsire of the famous trotting horse Beppo, and many other celebrated trotters and rackers;) that in his prime has racked his mile in 2.30, and although upwards of 20 years old, is stil kept for mares in Canada.

The dam of Mingo Chief was pure Canadian, and could trot a mile in 3 minutes without training. Mingo Chief was selected during the summer of 1841, in the neighborhood of Montreal (by a gentleman experienced in these matters,) as being the best horse he could find to cross upon the stock of this part of the country for the production of saddle horses. The celebrated Morgan breed of Vermont is said to be of the same cross.

☞Season commenced 1st April and ends 1st July.

ap 26 E. WEEKS, Manager.



DRILL MACHINES.

There are several Drill Machines made similar to the above figures for planting Corn, Cotton, Beet Seed, Peas, Turnip Seed, &c. which are sold at various prices.

Page's Iron Drills, as represented by above figure, is probably the best for field drilling, and is sold at $25

Other sorts for gardeners, . . 10a15

CORN SHELLERS, CRUSHERS, STRAW CUTTERS, &c. &c.

☞ *Prices reduced in proportion to the present rate of labour and materials.*☜

The subscribers offer for Sale, *Goldsborough's Corn Sheller* and *Husking Machine*,—warranted to shell or husk and shell 700 bushels of Corn per day by the power of two Horses.

Baldwin's Corn Sheller with *blower* attached—This machine with the power of two horses will shell and clean ready for market 400 bushels of corn per day.

Baldwin's Corn & Cob Crusher,—warranted to grind 25 or 30 bushels of Corn & Cob per hour, and put in fine order for feeding stock. This is the most durable, simple in construction, and most powerful of any Crusher made in this Country, and best adapted for extensive farming establishments. The power of two horses is required to drive it.

Straw Cutters, Cylindrical Improved—There are four sizes of these machines, which combine all the late improvements;—400 to 2000 bushels of hay, straw, cornstalks, &c. can be cut by them per day. Also, common Treadle, Evans' patent, and several other kinds STRAW CUTTERS, at low prices.

IN STORE,

Horse Powers, 2 sizes	Harrows, 5 kinds
Threshing Machines, do	Rollers and Drill Machines
Vegetable Cutters	Yankee Ox Yokes
Fanning Mills, 2 sizes	Harvest Tools, all kinds
Churns, 3 sizes	Post hole Augurs
Lime Spreaders	PLOUGHS, 25 sorts, embracing
Grindstones, hung on friction rollers	the Subsoil, and several other kinds of late introduction

Garden and Field SEEDS, a large and general assortment

TREES and PLANTS do do

CATALOGUES of the above furnished gratis, giving prices and description of each machine—also directions for planting seeds, trees, &c.

R. SINCLAIR, jr. and CO.

no 30 Manufacturers & Seedsmen, 60 Light st.

PEACH AND PEAR TREES.

The subscriber is prepared to supply Peach Trees of the choicest kinds, surpassed by none in the U. States, and of the earliest to the latest kinds, which he is enabled to sell at the very low rate of 12½ cents per tree, if packed an extra charge.

He can also supply a few very choice Pear Trees at 50 cts. per tree—and in the Fall will be able to furnish any quantity required of many kinds.

Catalogues furnished on application at the Farmer office. Entire reliance may be placed on the genuineness of these trees, and of their being of the choicest kinds. ap 12 S. SANDS.

STANDISH'S AMERICAN GLOBES.

The subscriber has been appointed agent for the sale of these useful and beautiful articles, they are in setts or pairs of three sizes 12, 10, and 6 inch.

THE TERRESTRIAL GLOBES,

Exhibit the boundaries of Empires, Kingdoms, and States, as they were settled and laid down: comprising also the recent discoveries of Perry, Burrows, and Ross in the Arctic Regions, and those of Denham, Clapperton, the Landers in Africa together with exploring voyages elsewhere.

THE 12 INCH CELESTIAL GLOBE,

Is compiled from the works of the most celebrated Astronomers, and the transactions of the Astronomical Society of London. It contains the new constellations—all the known stars to the ninth magnitude, each star is numbered or otherwise designated according to the most approved Astronomical tables, with their location corrected from the late observations of the younger Hershal, the Nebuleas, the variable, double, triple and quadruple Stars are also laid down. The 10 inch Celestial globe contains all the stars to the sixth magnitude, numbered as above, the 6 inch. Do. to the fifth Do.

Price of the 12 inch. per pair, with strong apple-tree stands. $18,00
" Ten inch. Do Do Do 14,00
" Six Do. Do Do Do 7,00

The above described globes have invariably taken premiums wherever they have been exhibited for competition; the engraving is executed in a very superior style: they will be forwarded to any part of the United Stated, carefully packed by applyng to the manufacturer Z. STANDISH, Albany, N. Y., or his agent, the subscriber at Baltimore.

March 1, S. SANDS.

SOUTH DOWN SHEEP FOR SALE.

Two Rams and two Ewes of the purest South Down breed of Sheep. These Sheep were brought from England to Maryland in the autumn of 1840, by Dr. Macaulay, and the following testimonials will show the pedigree and exceeding purity of the blood.

The South Down Sheep were purchased for Dr. Macaulay of Baltimore, at the request of James Alexander Esq. of Somer Hill, England, by his agent, Mr. Thomas Waters of Stratford, Subcastle, Salisbury. They were part of the flock of Mr. Northeast, of Tedworth, Wiltshire. Mr. Waters in a letter to Dr. Macaulay, says, "I have much pleasure in informing you that I have selected a Ram for you which I consider of the purest South Down breed, and have this morning received a letter, from the same person I bought the Ram of, to say, he has selected six Ewes for me, from his own stock, also,—he is the first breeder we have in this part of the country, and probably in any other part of England, of the purest South Down Blood. The price of the Ram No. 16, is thirty guineas, and the six Ewes forty five shillings each, which I consider moderate."

The following is Mr. Northeast's letter to Mr. Waters, on the Pedigree of the Ram and Ewes purchased from him.

Tedworth, Sept. 14th, 1840.

My dear Sir.—I have this morning looked out for you six Ewes, which I think match well, and will please you. Four of them are six tooths and two are two tooths, and the Ram No. 16, will look like one of the family. No. 16 was bred from one of my best Ewes, and the Ewe having two, bred both up to weaning time. He was got by Mr. Ellman's No. 15, which was let this year by auction at sixty three guineas, and is considered the best sheep in England; he is now hired by Lord Huntingfield and Mr. Crips of Gedgrove.

For the last few years I have averaged my Ewes cull and best at 41s. 6d. that is, best at 42 and rest at 40s. each, and I trust you will not think I overcharge you by naming 45s. each, for the 6 best, as I shall expect to get about 42 for those left.

I remain, my dear sir, yours very truly,

THOMAS B. NORTHEAST.

Mr. Thomas Waters.

Stratford Sub-castle.

The Rams or Ewes will be sold seperate or together, at the wish of the purchasser. For a view of the sheep, or terms, apply to JACOB WOLFF, Esq. at this farm, adjoining Randalls town ear the Liberty Road.

nPrice of a last spring's ram $25—Ewe 15 ja 18

THE SUBSCRIBER,

Who exhibited the Corn and Cob Crusher and Grinder at the Agricultural meeting, having rented the Wheelwright & Blacksmith shop with the water power attached in the village of Franklin, will continue to build his Corn and Cob Crushers and Grinders, and has so improved them that persons who have not got horse powers can use them by hand power with sufficient facility to supply the wants of small farms, and with one or two horse powers can do more work than any other machine for the same purpose that will require double the power. This is not puffing, for it can be and has been made manifest. The price of the crusher is $40.

He is also prepared to do all kinds of repairing to Agricultural or any or other kind of machinery at the shortest notice.

Horse-shoeing and blacksmith work in general, done in the neatest and strongest manner, all of which he warrants to be good.

Orders for any of the above machines can be left with Mr. Sands at the office of the American Farmer, or with the subscriber.

au 24 WM. MURRAY, Franklin, Balt. co. Md

FOR SALE.

A handsome thorough bred DURHAM BULL, about 6 or 7 months old, from very superior stock. Price $65, deliverable in Baltimore—Apply to SAM. SANDS.

Jan. 18.

FOR SALE—SHEEP AND HOGS.

Two Bucks, NEW LEICESTER breed, 1 year old this coming spring—and one Ewe, same breed, 2 years old. Also, 2 pairs of SOUTH DOWN Sheep, about 2 years old. Price for the Rams, 20—for the Ewes, $15. S. SANDS.

AGRICULTURAL MACHINERY & IMPLEMENTS.

The subscriber begs leave to assure the public that he is prepared to execute orders for any of his agricultural or other machinery or implements with promptness. His machinery is so well known that it is unnecessary to describe the various kinds, but merely annex names and prices:

Portable Saw Mill with 12 ft. carriage, and 24 ft. ways and 4 ft. saw,	$300
Extra saws for shingles, with 3 pair of head blocks,	125
Post Morticing Auger,	15
Bands,	10
Horse Power of great strength,	200
Corn and Cob Crusher, wt. 600 lb.	65
Thrashing Machine, wt. 300 lb.	75
Corn Planter, wt. 100 lb.	25
Thrashing Machine, wt. 600 lb.	150
Grist Mill, 2½ ft. cologne stones,	150
Do. 3 ft. do.	175
Belts for the same,	15
Post Auger, wt. 15 lbs.	5
Tobacco Press complete, portable,	85
ortable Steam Engine, with portable Saw Mill and cutting off Saw,	3500
Large Sawing and Planing Machine with cutting off saw, or cross cutting for arge establishments,	1100
If made of iron,	3000
Large Boring and Morticing machine for large establishments	150
Tenoning Machine	200
Vertical Saw	125
Small Morticing Machine, suitable for carpenters,	25

All of which articles are made in the most superior style of workmanship, of the best materials, and warranted to answer the purposes for which they are intended. It cannot be expected that the subscriber can speak of the merits of the above enumerated articles within the compass of an advertisement. Suffice it to say, that each have found numerous purchasers, and proved entirely satisfactory. The Portable Saw Mill with a 10-horse power engine, can cut, *with perfect ease*, 10,000 feet of lumber a day, and, if necessary, could greatly exceed that quantity.

GEORGE PAGE,

West Baltimortreet, Baltimore, Md.

☞Pamphlets containing cuts with descriptions of the above named machines, can be had on application (if by letter post paid) to the subscriber, or to Mr. S. Sands, at the office of the American Farmer. sep 1 tf

MILLWRIGHTING, PATTERN & MACHINE MAKING

By thesubscriber, York, near Light st. Baltimore, who is prepared to execute orders in the above branches of business at the shortest notice, and warrants all mills, &c. planned and executed by him to operate well.

Murray's Corn and Cob Crushers for hand power	$25
Do. by horse power, from 6 to 12 bushels per hour,	35to40
Corn Shellers, shelling from 30 to 300 bushels an hour,	15to75
Portable and Stationary Horse Powers	75to150
Self-sharpening hand Mills, a superior article,	12 to 20
Cylinder Straw and Oat cutters, 2 knives,	20a35
Mill, carry log, and other Screws, 2 small Steam Engines	3 to 4 horse power.

Any other machines built to order.

Patent rights for sale for the Endless Carriage for gang Saw Mills, a good invention.

☞Orders for crushers can be left with any of the following agents: Thos. Denny, Seedsman, Baltimore; J. F Callan, Washington, D. C; Calvin Wing, Norfolk; S. Sands, Farmer office; or the subscriber, JAS. MURRAY, Millwright, Baltimore.

may 28 1y

BENTLEY'S AGRICLTURAL STEAM GENERATOR MANUFACTURED BY BENTLEY, RANDALL & Co.,

Manufacturers of *Bentley's Convoluted Steam Boilers*, Baltimore, Md. for steaming Corn Stalks, Hay, Potatoes, Boiling water, &c. It is also highly recommended to Tanners for steaming Leaches, also for various manufacturing and mechanical purposes, where steam or large quantities of hot water is required. This article is made wholly of iron, and was got up expressly to meet the wants of the Agricultural community, and it is confidently believed that for simplicity, durability, economy in money, fuel, time, and room combined its equal has not been offered to the public. It possesses all the principles of the most approved Tubular Locomotive Boilers, for saving of fuel, while the construction is such that one of equal size, strength and durability that has heretofore cost $100, or more, is now offered at $45. It is operated equally well with Anthracite coal as with wood, and can be removed by two persons at pleasure.—Prices No. 1 $45, considered of capacity enough for ordinary Farm purposes; No. 2 $60, No. 3 $75.

BENTLEY, RANDALL & Co.

McCausland's Brewery, Holliday, st. near Pleasant.

We have the liberty of referring to the following gentlemen, viz:—David Barnum, Esq City Hotel; Captain Jackson, warden of the Maryland Penitentiary, and Doct. Robt Dorsey of Edw., where they can be seen in operation.

Agents, J. F. Callan, Esq. Washington City; Capt. John Brooks, Upper Marlboro', Prince Georges' Co. Md. where samples can be seen. For numerous testimonials in favor of the above call on the manufacturers or their agents.

N. B. B. R. & Co., are also agents for Murray's Corn and Cob Crushers. Balto. Md., Dec. 1842.

de. 7

BERKSHIRE PIGS.

The subscriber offers for sale Berkshire Pigs, 2 to 4 months old, from the piggery of Messrs. Gorsuch, and others of the best breeders in Maryland, at $12 1-2 deliverable in this city, or $15 caged with feed for any port on the coast of the U.S. m 29 S. SANDS

AN IMPORTED LARGE JACK, FOR SALE.

He can be warranted as a sure foal getter, and will be sold at the very low price of $250, deliverable in this city. Apply to

fe 23 S. SANDS